UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,356	06/14/2007	Pierre Ravat	47113-5096-00 (228856)	6741
	7590	EXAMINER		
1500 K STREE		COY, NICOLE A		
SUITE 1100 WASHINGTON, DC 20005-1209			ART UNIT	PAPER NUMBER
			3672	
			MAIL DATE	DELIVERY MODE
			05/06/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/590,356	RAVAT, PIERRE				
Office Action Summary	Examiner	Art Unit				
	NICOLE COY	3672				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on <u>27 Ja</u>	nuary 2009.					
<i>i</i> —	/ <del></del>					
•	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
oloood in absordance with the places and of E.	x parte quayre, 1000 o.b. 11, 10	.5. 210.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-9</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-9</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	oloction requirement					
o) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>27 January 2009</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
	• • • • • • • • • • • • • • • • • • • •	• •				
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
<ol> <li>Certified copies of the priority documents</li> </ol>	s have been received.					
<ol><li>Certified copies of the priority documents</li></ol>	have been received in Application	on No				
3. Copies of the certified copies of the prior	ity documents have been receive	ed in this National Stage				
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
200 and attached actained critical action of a local time continue copies not received.						
Attachment(s)  1) M Notice of References Cited (RTO 902)  1) M Notice of References Cited (RTO 902)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO/SB/08)  5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:						

Application/Control Number: 10/590,356 Page 2

Art Unit: 3672

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Techy et al. (USP 3,390,730) in view of Presley et al. (USP 6,739,416).

With respect to claims 1 and 6, Techy et al. disclose a single pass drilling apparatus/method comprising: an elongated drill steel (7) having a leading and a trailing end with reference to a drilling direction, said leading end having a connection portion (see figure 2), a one-piece drill bit (9) having rock machining means, said drill bit being rigidly connected to the drill steel, wherein the single pass drilling apparatus further comprises a rock bolt (13) adapted to at least partially enclose the drill steel and in that the drill bit and the rock bolt are designed to allow the drill bit to pass the rock bolt during retraction of the drill bit (see figure 5). Techy et al. does not disclose that the center part of the pilot part is spaced apart from the center part of the drill steel. Presley et al. disclose a pilot bit offset from the drill steel (see figure 3) in order to define an increased rotational diameter relative to its actual physical diameter and to create an oversized borehole of prescribed size or diameter. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Techy et al. by including a pilot bit offset from the drill string as taught by Presley et al. in order to

Art Unit: 3672

define an increased rotational diameter relative to its actual physical diameter and to create an oversized borehole of prescribed size or diameter.

With respect to claims 2 and 7, Techy et al. disclose that the greatest diametrical dimension of the drill bit is smaller than the smallest diametrical dimension of the rock bolt (see figure 5a) and in that the one-piece drill bit comprises a pilot part and a reamer part having spaced middle lines (see figure 3 and 3a).

With respect to claim 3, Techy et al. disclose that the middle line of the pilot part substantially coincides with the center axis of the rock bolt during drilling (see figure 3).

With respect to claim 4, Techy et al. disclose that the middle line of the reamer part substantially coincides with the rotational axis of the leading end of the drill steel (see figure 3).

With respect to claim 5, Techy et al. disclose use of a one-piece drill bit that comprises a pilot part and a reamer part having spaced middle lines in a single pass drilling apparatus according to claim 1 (see figure 3).

With respect to claim 8, Techy et al. disclose a rock bolt for a single pass drilling apparatus as defined in claim 1, said rock bolt having a partly tube shaped body having a leading end and a trailing end (see figure 2), said trailing end having a washer and a washer stop means (wherein Techy et al. discloses it is rigidly attached. It would have been an obvious matter of design choice to use a washer, since applicant has not disclosed that a washer solves any stated problem or is for any particular purpose and it appears that the invention would work equally well with the rigid attachment means of Techy), said rock bolt being fluid expansible (wherein the rock bolt is capably of being

Application/Control Number: 10/590,356 Page 4

Art Unit: 3672

fluid expansible), wherein the rock bolt is substantially semi-circular and designed as a general U-shape to allow passage of a drill bit rigidly connected to a drill steel (see figure 2).

With respect to claim 9, Techy et al. disclose that ends in a radial cross-section of the rock bolt are substantially diametrically opposite to each other (see figure 2).

## Response to Arguments

3. Applicant's arguments filed 1/27/09 have been fully considered but they are not persuasive. Applicant argues that Techy et al. fails to disclose the feature that a center axis of the pilot part is spaced apart from a center axis of the drill steel. While the Examiner agrees with this statement, this feature is not novel. As noted above, Presley et al. teach a center axis of a pilot part spaced apart from a center axis of the drill steel in order to define an increased rotational diameter relative to its actual physical diameter and to create an oversized borehole of prescribed size or diameter. Thus, the claims are not in condition for allowance.

The drawing objection has been withdrawn and the drawings filed 1/27/09 are acceptable.

## Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Page 5

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE COY whose telephone number is (571)272-5405. The examiner can normally be reached on M, Tu, F, and every other Wednesday from 8:30am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/590,356 Page 6

Art Unit: 3672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William P Neuder/ Primary Examiner, Art Unit 3672

nac